

EK 2: DETAYLI MÜFREDAT DERS PLANI-EN

ALANYA ALAADDİN KEYKUBAT UNIVERSITY
RAFET KAYIŞ FACULTY OF ENGINEERING
DEPARTMENT OF MECHANICAL ENGINEERING (English)
BACHELOR DEGREE CURRICULUM

YEAR 1

SEMESTER 1

COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
TDB 101	Turkish Language I	2	0	0	2	2	C	Turkish	N	-	N	-	N	-	-
MEC 101	Introduction to Mechanical Engineering	2	0	0	3	3	C	English	N	-	N	-	N	-	-
MEC 103	Technical Drawing	2	2	0	7	7	C	English	N	-	N	-	N	-	-
MEC 105	Physics I	3	0	1	5	5	C	English	N	-	N	-	N	-	-
MEC 107	Mathematics I	4	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 109	Introduction to Computer and Information Systems	1	1	0	2	2	C	English	N	-	N	-	N	-	-
MEC 111	Chemistry	3	0	0	4	4	C	English	N	-	N	-	N	-	-
SEC 101	Elective Course 1 (Out of Area)	2	0	0	2	2	CE	English	N	-	N	-	Y	-	1, A
TOTAL		19	3	1	30	30									

YEAR 1

SEMESTER 2

COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
TDB 102	Turkish Language II	2	0	0	2	2	C	Turkish	N	-	N	-	N	-	-
MEC 102	Statics	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 104	Computer Aided Technical Drawing	2	2	0	5	5	C	English	N	-	N	-	N	-	-
MEC 106	Fundamentals of Electrical-Electrical Engineering	2	0	0	3	3	C	English	N	-	N	-	N	-	-
MEC 108	Mathematics II	4	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 110	Introduction to Scientific Programming	2	2	0	5	5	C	English	N	-	N	-	N	-	-
MEC 112	Physics II	3	0	1	5	5	C	English	N	-	N	-	N	-	-
TOTAL		18	4	1	30	30									

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YEAR 2															
SEMESTER 3															
COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
ATA 101	Principles of Ataturk and Turkish Revolution History I	2	0	0	2	2	C	Turkish	N	-	N	-	N	-	-
MEC 201	Strength of Materials I	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 203	Dynamics	4	0	0	6	6	C	English	N	-	N	-	N	-	-
MEC 205	Thermodynamics I	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 207	Material Science	4	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 209	Differential Equations	4	0	0	5	5	C	English	N	-	N	-	N	-	-
SEC 201	Elective Course 2 (Out of Area)	2	0	0	2	2	CE	English	N	-	N	-	Y	-	1, A
TOTAL		22	0	0	30	30									

YEAR 2															
SEMESTER 4															
COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
ATA 102	Principles of Ataturk and Turkish Revolution History II	2	0	0	2	2	C	Turkish	N	-	N	-	N	-	-
MEC 202	Strength of Materials II	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 204	Fluid Mechanics I	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 206	Thermodynamics II	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 208	Numerical Methods	3	0	0	4	4	C	English	N	-	N	-	N	-	-
MEC 210	Internal Combustion Engines	3	0	0	5	5	C	English	N	-	N	-	N	-	-
SEC 202	Elective Course III (Technical Course)	2	2	0	4	4	CE	English	N	-	N	-	Y	-	1
SEC 202.1	Introduction to Finite Element Methods	2	2	0	4	4	E	English	N	-	N	-	Y	SEC 202	-
SEC 202.2	Mathematical Tools for Mechanical Engineers														
SEC 202.3	Introduction to Automotive Engineering														
SEC 202.4	Computer Aided Material Design														
TOTAL		19	2	0	30	30									

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YEAR 3															
SEMESTER 5															
COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
MEC 301	Internship I	0	0	0	0	0	C	English	N	-	N	-	N	-	B
MEC 303	Fluid Mechanics II	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 305	Machine Elements I	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 307	Manufacturing Processes I	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 309	Theory of Machines I	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 311	Renewable Energy	2	0	1	4	4	C	English	N	-	N	-	N	-	-
SEC 301	Elective Course IV (Design Course)	2	0	2	6	6	CE	English	N	-	N	-	Y	-	1
SEC 301.1	Computer Aided Design	2	0	2	6	6	E	English	N	-	N	-	Y	SEC 301	-
SEC 301.2	Computer Aided Structural Analysis														
SEC 301.3	Computational Fluid Dynamics														
SEC 301.4	Computer Aided Manufacturing														
TOTAL		16	0	3	30	30									
YEAR 3															
SEMESTER 6															
COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
MEC 302	Heat Transfer	4	0	0	6	6	C	English	N	-	N	-	N	-	-
MEC 304	Machine Elements II	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 306	Manufacturing Processes II	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 308	Theory of Machines II	3	0	0	5	5	C	English	N	-	N	-	N	-	-
SEC 302	Elective Course V (Technical Course)	3	0	0	3	3	CE	English	N	-	N	-	Y	-	1
SEC 302.1	Energy Efficiency	3	0	0	3	3	E	English	N	-	N	-	Y	SEC 302	-
SEC 302.2	Pipeline Engineering														
SEC 302.3	Engineering Metrology and Quality Control														
SEC 302.4	Basic Die Technologies														
SEC 304	Elective Course VI (Design Course)	2	0	2	6	6	CE	English	N	-	N	-	Y	-	1
SEC 304.1	Applied Thermodynamics	2	0	2	6	6	E	English	H	-	H	-	Y	SEC 304	-
SEC 304.2	Applied Heat Transfer														
SEC 304.3	Hydraulic and Pneumatic Circuits														
SEC 304.4	Mechanics of Fiber-Reinforced Composites														
TOTAL		18	0	2	30	30									

EK 2: DETAYLI MÜFREDAT DERS PLANI-EN

YEAR 4															
SEMESTER 7															
COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
MEC 401	Mechanical Engineering Design	0	3	0	6	6	C	English	N	-	Y	-	N	-	4
MEC 403	Mechanical Engineering Laboratory I	1	0	2	2	2	C	English	N	-	N	-	N	-	-
MEC 405	Control Systems	3	0	0	5	5	C	English	N	-	N	-	N	-	-
MEC 407	Internship II	0	0	0	0	0	C	English	N	-	N	-	N	-	B
ISG 401	Occupational Health and Safety I	2	0	0	2	2	C	English	N	-	N	-	N	-	-
SEC 401	Elective Course VII (Technical Course)	3	0	0	5	5	CE	English	N	-	N	-	Y	-	3
SEC 401.1	Introduction to Fracture Mechanics	3	0	0	5	5	E	English	N	-	N	-	E	SEC 401	-
SEC 401.2	Intermediate Strength of Materials														
SEC 401.3	HVAC Systems														
SEC 401.4	Automation & Robotics														
SEC 401.5	Quality Control in Manufacturing														
TOTAL		15	3	2	30	30									

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YEAR 4															
SEMESTER 8															
COURSE CODE	COURSE NAME	COURSE HOUR			LOCAL CREDIT	ECTS	COURSE TYPE	TEACHING LANGUAGE	SIDE CONDITION STATUS	SIDE CONDITION CODE	PRECONDITION STATUS	PRECONDITION CODE	GROUP STATUS	GROUP COURSE CODE	DESCRIPTION CODE
		T	P	L											
MEC 402	Graduation Project	0	3	0	6	6	C	English	N	-	Y	MEC 401	N	-	5
MEC 404	Mechanical Engineering Laboratory II	1	0	2	2	2	C	English	N	-	N	-	N	-	-
ISG 402	Occupational Health and Safety II	1	0	0	1	1	C	English	N	-	N	-	N	-	-
SEC 402	Elective Course VIII (Technical Course)	3	0	0	6	6	CE	English	N	-	N	-	Y	-	3
SEC 402.1	Refrigeration Technology	3	0	0	6	6	E	English	N	-	N	-	Y	SEC 402	-
SEC 402.2	Experimental Mechanics														
SEC 402.3	Thermal Power Engineering														
SEC 402.4	Mechanical Vibrations														
SEC 402.5	Intermediate Manufacturing Process														
SEC 402.6	Robotic Design														
SEC 404	Elective Course IX (Out of Area)	2	0	0	3	3	CE	English	N	-	N	-	Y	-	1
SEC 404.1	Engineering Ethics	2	0	0	3	3	E	English	N	-	N	-	Y	SEC 404	-
SEC 404.2	Total Productive Management														
SEC 404.3	Total Quality Management														
SEC 404.4	Entrepreneurship														
SEC 404.5	Economics														
SEC 404.6	Project Management														
TOTAL		13	3	2	30	30									
FINAL TOTAL		139	15	11	240	240									

*Abbreviations: **T:** Theoretical, **P:** Practice, **L:** Laboratory, **C:** Compulsory, **E:** Elective, **CE:** Compulsory Elective, **Y:** Yes, **N:** No

DESCRIPTIONS
1 Only 1 (one) course from the related group must be selected.
2 Only 2 (two) courses from the related group must be selected.
3 Only 3 (three) courses from the related group must be selected.
4 In order to take this course (MEC 401 Mechanical Engineering Design), the student must be classified as 4th (fourth) class according to ALKÜ Ön Lisans ve Lisans Eğitim Öğretim Yönetmeliği.
5 In order to take this course (MEC 402 Graduation Project), the student must have succeeded in MEC 401 Mechanical Engineering Design with a score of at least CC.
A Appropriate elective courses are available in OBS.
B Students must complete their workplace training (internships) provided that they are at least 40 working days from the second grade. Those who complete their workplace education are considered successful from this course. The workplace education course does not participate in the grade point average.